

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Confirmation No. 6011

Edwin Southern

Attorney Docket No. 99 1175

Serial No. 09/422,803

Group Art Unit 1631

Filed October 22, 1999

Examiner A. Marschel

ANALYSING POLYNUCLEOTIDE SEQUENCES:

Mail Stop AMENDMENT

PATENT OFFICE FEE TRANSMITTAL FORM

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEE FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

Sir:

Attached hereto is a check in the amount of \$180.00 to cover Patent Office fees relating to filing the following attached papers:

Information Disclosure Statement\$180.00

A duplicate copy of this paper is being submitted for use in the Accounting Division, Office of Finance.

The Commissioner is authorized to charge any deficiency or to credit any overpayment associated with this communication to Deposit Account No. 23-0975, with the EXCEPTION of deficiencies in fees for multiple dependent claims in new applications.

Respectfully submitted,

Edwin Southern

Registration No. 33,367

Attorney for Applicant

WMC/dlk WENDEROTH, LIND & PONACK, L.L.P. 2033 K St., N.W., Suite 800 Washington, D.C. 20006-1021 Telephone (202) 721-8200 December 8, 2005

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INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450 The COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEE FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975.

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicant request consideration of the reference listed on attached form PTO-1449 and any additional information identified below in paragraph 3. A legible copy of each reference listed on the Form PTO-1449 is enclosed, except a copy is not provided for:

	[]	each U.S. Patent and U.S. Patent application publication;
		each reference previously cited in the international application PCT/; and/or
	[]	each reference previously cited in prior parent application Serial No.
1a.	[] This	Information Disclosure Statement is submitted:
		aree months of the filing date (or of entry into the National Stage) of the above-application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office

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Action after the filing of an RCE,

and thus no certification and/or fee is required.

1b. [X] This Information Disclosure Statement is submitted

after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) [] the certification of paragraph 2 below is provided, or
- (2) [X] the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.
- 1c. [] This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

the certification of paragraph 2 below is provided, and

the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

2. It is hereby certified

٠.

- a. [] that each item of information contained in this Information Disclosure

 Statement was first cited in any communication from a foreign patent office in a

 counterpart foreign application not more than three months prior to the filing of
 the Statement, or
- b. [] that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.
- 3. [] Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4.		r each made		ence listed on the attached form PTO-1449, reference							
	a.	[]	a full or partial English lang	guage translation submitted herewith,							
	b.		a foreign patent office searcherewith,	h report (in the English language) submitted							
	c.	[]	the concise explanation con at page,	tained in the specification of the present application							
	d.	[]	the concise explanation set	forth in the attached English language abstract,							
	e.	0	the concise explanation set to reference:	forth below or on a separate sheet attached to the							
5.	[]	A for	eign patent office search repo	ort citing one or more of the references is enclosed.							
6.	[]	State	ment Under 37 CFR 1.704(d)	!							
	Each item of information contained in the Information Disclosure Statement was first cited in any communication from a foreign Patent Office in a counterpart application, and this communication was not received by any individual designated in §1.56(c) more than thirty days prior to the filing of the Information Disclosure Statement.										
7. in relat	[X tion	•	The cited references are doc position proceedings and app	uments and Declarations filed in the EPO and Japan eals.							
				Respectfully submitted,							
				Edwin Southern							
				Warren M. Cheek, Jr. Registration No. 33,367							
WMC/	'dlk			Attorney for Applicant							

Washington, D.C. 20006-1021 Telephone (202) 721-8200 Facsimile (202) 721-8250 December 8, 2005

'Sheet 1 of 13			INFORMA	TION DISCLOS	URE STATEMENT					
FORM PTO 1449 (•	TMENT OF COMMERCE	=	ATTY DOCKS 99_1175	ET NO.		SERIAL (
LIST OF	REFERE	D TRADEMARK OFFICE NCES CITED BY APPLICAN	-	APPLICANT Edwin SOL	JTHERN					
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	AA	4,216,245	8/1980	Joh	nson	4	27	2		
i	АВ	4,395,486	7/1983	Wilso	on et al.	4	35	6		·
<i>f</i> _	AC	4,563,419	1/1986	Ranl	ki et al.	4	35	6		
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	AD	0 235 726	9/1987		EP					
	AE	0 171 150	2/1986	[EP					
	AF	85/01051	3/1985	V	vo					
	AG	0 268 237	5/1988	[EP					
	АН									
		OTHER	DOCUMENT(S) (I	ncluding Author,	Title, Date, Pertine	ent Pages	s, Etc.)			
	AI	Declaration from Ra	domir Crkvenja	akov (with for	ur exhibits), Se	ptembe	er 1996.			
	AJ	Declaration from Iva	n Labat , Sept	ember 1996.						:
-	AK	Statement from the 1996.	Institute of Mol	ecular Gene	tics and Geneti	ic Engir	neering (IMGGE) in Be	lgrade, Sept	ember
	AL	Statement by Profes symposium, and a p	sor Roger Ekir ost-published	ns (with an a paper corres	bstract of a lec ponding to said	ture giv	en by hi e), Dece	m on 4/11/88 a mber 1996.	at a	
	АМ	Statutory Declaration	n of Dr. Nichlol	as Vaughan	Ashely (with E	xhibit N	IVA1), M	ay 1995.		
	AN	Statutory Declaration	n of Dr. William	n Bains (with	Exhibits WB1,	WB2 a	and WB3	s), May 1995.	<u></u>	
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy this form with next communication to applicant.

'Sheet 2 of 13		-	INFORMA	TION DISCLO	SURE STATEMEN	т					
FORM PTO 1449 (n	•	TMENT OF COMMERC	F	99_117			SERIAL 09/422				
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	ВА	4,704,353	11/1987	Hump	hries et al.	4	135	4			
	ВВ	4,327,073	4/1982	ŀ	luang	4	124	1			
r _	вс	4,728,502	3/1988	l	Hamill	4	122	116			
•	BD	5,002,867	3/1991	М	acevicz	4	135	6			
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	BE	88/01302	2/1988		wo						
	BF	86/03782	7/1986		wo			:			
	BG	0 238 332	9/1987		EP						
	ВН	2 156 074	10/1985		GB						
	ВІ	0 237 362	9/1987		EP						
		OTHER	DOCUMENT(S) (Including Autho	or, Title, Date, Pertir	nent Page	s, Etc.)				
	BJ	Declaration of Profe	ssor Lubert St	ryer, Janua	ry 1997.						
•	ВК	Statutory Declaratio	n of Dr. Williar	n Bains, Ja	nuary 1997.						
	BL	Statutory Declaratio	n of Dr. Nichol	as Vaughar	n Ashley, Janua	ıry 1997					
	ВМ	Declaration of Edwi	n Mellor South	ern (with Ex	chibits EMS1 an	d EMS2	2), Janua	ıry 1998.			
<u> </u>									·····		
	BN	Declaration of Dr. T	claration of Dr. Thomas Gingeras, January 1999.								
	во	Declaration of Profe	ssor Calvin Qu	uate, Janua	ry 1999.						
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	CA	5,202,231	4/1993	Drm	anac et al.	4	135	6		
1,	СВ	5,474,796	12/1995	В	rennan	4	127	2.13	<u>.</u>	
٠.	СС	5,429,807	7/1995	Mat	tson et al.	4	122	131		
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	CD	89/11548	11/1989		wo					
	CE	93/22480	11/1993		wo					
	CF	0 386 229	9/1990		EP					
	CG	0 281 927	9/19 98		EP					
	СН	0 130 739	1/1985		EP					
		OTHER	DOCUMENT(S) (/	ncluding Auth	or, Title, Date, Pertii	nent Page	s, Etc.)			
	CL	Declaration of Dr. G	ilenn Mc Gall, 、	January 19	99.					
	CJ	Declaration of Edwir	n Mellor South	ern, July 20	001.	• • •				
	СК	Bird & Bird, "Claima Technology (OGT) v								gdom.
	CL	Declaration of Marvi	in Stodolsky, O	ctober 199	6.					
	СМ	M. S. Urdea et al., "/ biological samples v human serum", Gen	vithout blotting	or radioact	tivity; application					.,
	CN	C. G. Miyada et al., 1987, pp. 94-107.	"Oligonucleotic	de Hybridiza	ation Technique	es", Meti	hods in I	Enzymology, Vo	l. 154, No. 6	5,
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'Sheet 4 of 13			INFORMA	TION DISCLC	SURE STATEMENT	<u>r</u>				
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	DA	4,591,570	5/1986	(Chang	<u> </u>	436	518		
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	DD	0 228 075	7/1987		EP				 	
	DE	84/03151	8/1984							
	DE	0 194 132	94 132 9/1986 EP							
	DG	0 063 810	11/1982		EP					
	DH	0 130 523	1/1985		EP					
	•	OTHER	DOCUMENT(S) (I	Including Auth	or, Title, Date, Pertine	ent Page	es, Etc.)			
	DI	E. Calva et al., "Anal Gel Electrophoresis, Chemistry, Vol. 255,	RNA-DNA Hy	ybridization,	, and RNase T1 [
-	DJ	A. R. Dunn et al., "A mRNA and Discrete								
,	DK	G. Wengler et al.,"A Alphaviruses", Virolo				/ Betw∈	en the N	lucleic Acids of	Different	
	DL	J. M. Coffin et al., "S Sequence" Cell, Vol.	Structure of the	Genome o vril 1978, pr	of Moloney Murin 5. 761-773.	e Leuk	temia Viri	us: A Terminall	y Redundani	t
	DM	A. Palva et al., "Labo Acid Sandwich with I	oratory Method Hybridization",	ds, Quantific, DNA, Vol.	cation of α-Amyla 7, No. 2, 1988, μ	ase mF pp. 138	RNA in <i>B</i> . 5-142.	acillus subtilis l	by Nucleic	
	DN	R. Drmanac et al., "S presented at Cold Sp Spring Harbor, NY.								
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'Sheet 5 of 13			INFORMA'	TION DISCLO	SURE STATEMENT					
FORM PTO 1449 (n		TMENT OF COMMERCE	-	ATTY DOCI 99_1178			SERIAL I 09/422,			
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	EC	0 142 299	5/1985		EP					
	ED	86/06487	11/1986		WO					
	EE	84/03564	9/1984		wo					
	EF	86/00991	2/1986		wo					
	EG	92/10092	6/1992		wo					
	<u></u>	OTHER	DOCUMENT(S) (/	ncluding Autho	or, Title, Date, Pertin	ent Page	s, Etc.)			
	EH	R. Drmanac et al., " Harbor Symposium	Sequencing by on Gene Mapr	Hybridizati	ion , Theory of the equencing, April	ne Meth 27-May	nod", pos 1, 1988	ter presented , Cold Spring	at Cold Sprin Harbor, NY.	ıg
	ΕI	I. Labat, "Subfragme Report, Labat Thesi	ents as an info s, (and English	rmative cha translation	aracteristic of the	e DNA i	nolecule	- computer si	mulation", Se	arch
	EJ	R. Frank et al., "Sim Complete Methodole							n Efficient and	ı
•	EK	R. Frank et al., "A no oligonucleotides: se								377.
	EL	A. R. Brautigam et a Deoxyribonucleic Ac pp. 226-234.								
	EM	R. K. Saiki et al., "A Oligonucleotide Pro						DNA with Alle	ele-Specific	
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy this form with next communication to applicant.

'Sheet 6 of 13			INFORMA	TION DISCLO	SURE STATEMENT	г				
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	FI	A. Rosenthal et al., different eligodeoxy Research, Vol. 13, I	ribonucleotides	using a ne	ew, mechanically					
	FI	B. Lewin, Ed., "Ger	nes", Third Edit	ion, 1987, _l	op. 360-362, Jol	nn Wile	y & Sons	, NY, NY.		
	FJ	R. B. Wallace et al., Base Pair Mismatch	"Hybridization ", Nucleic Acid	of Synthet s Research	ic Oligodeoxyrib n, Vol. 6, No. 11	onucle , 1979,	otides to pp. 3543	O _x 174 DNA: T -3557.	he Effect of S	Single
•	FI	G. Beltz et al., "Isola Methods", Methods						ies by Filter H	ybridization	
	FL	Doklady Biochemist Russian Original, Vo Consultants Bureau	ol. 303, No. 1-6	, Novembe	er-December 198	88, pp.	355-452	and Translatio	Section, n from Russi	an,
	FM	F. C. Kafatos et al., a dot Hybridization I	"Determination Procedure", Nu	of Nucleic cleic Acids	Acid Sequence Research, Vol.	Homol 7, No.	ogies an 6, 1979,	d Relative Con pp. 1541-1552	centrations t	ру
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy this form with next communication to applicant.

Sheet 7 of 13			INFORMA	TION DISCLO	OSURE STATEMENT					
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	GI	R. J. Lipshutz et al., Vol. 19, No. 3, 1995			robe Arrays to Ac	ccess	Genetic [Diversity", BioT	echniques,	
	GJ	T. R. Gingeras et al. 15, No. 13, 1987, pp		n Propertie	s of Immobilized	Nuclei	c Acid", I		Research, Vo	1.
	GK	P.T. Gilham, "The S Polynucleotides", J.							of	
	GL	H. M. Geysen et al., Methods, Vol. 102, 1			nalysis using Per	ptide S	ynthesis'	", Journal of Im	ımunological	
	GM	G. M. Church et al.,	"Genomic Seq	uencing", F	Proc. Natl. Acad.	Sci., V	/ol. 81(7)	, April 1984, pp	ɔ. 1991-1995	
	GN	V. J. Kidd et al., "α ₁ -, Nature, Vol. 304, Jul			tection by Direct /	Analys	sis of the	Mutation in the	Gene",	
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy this form with next communication to applicant.

Sheet 8 of 13			INFORM	ATION DISCLO	SURE STATEME	NT			
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	HG	P. Masinkowski et a Breast Cancer Cell						F-7 Human	
	НН	G. K. Sim et al., "Us Multigene Families"						ion of the Ch	orion
	HJ	Margaret L. M. And Approach, 1985, p				ation", Nuclei	c Action Hybridisati	on, A Practic	cal
t	HJ	W. Bains et al., "A f pp. 303-307.	Novel Method	for Nucleic	Acid Sequence	e Determinati	on", J. Theor. Biol.,	Vol. 135, 19	88,
	НК	U. B. Voss et al., "T Society Transaction				nd Their Hyb	ridization Properties	s", Biochemic	cal
	HL	Ghosh et al., "Cova 13, 1987, pp. 5353-		nt of oligonu	ucleotides to So	olid Supports	", Nucleic Acids Re	search, Vol.	15, No.
	НМ	Federation Proceed	lings, Vol. 43,	No. 7, May	4, 1984, Abstra	act 3669.			
	HN	T. Maniatis et al., "N Spring Harbor, NY.	Nolecular Clon	ing", A Labo	oratory Manual	, Cold Spring	Harbor Laboratory	, 1982, p. 28	2, Cold
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Sheet 9 of 13			INFORMA	TION DISCLO	SURE STATEMENT							
FORM PTO 1449 (,	TMENT OF COMMERCE	=	ATTY DOC 99_117			AL NO. 22,803					
PA	TENT AN	ID TRADEMARK OFFICE		APPLICAN Edwin SC	T DUTHERN	<u>.</u>						
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,	IC	C. R. Cantor et al., " pp. 1378-1383.	'Report on the	Sequencin	g by Hybridization	Workshop	', Genomics, Vol	. 13, 1992,				
	T. L. Bugawan et al., "Rapid HLA-DLB Typing Using Enzymatically Amplified DNA and Nonradioactive Sequencing-Specific Oligonucleotide Probes", Immunogenetics, Vol. 32, 1990, pp. 231-241.											
	IC	Global Technology (pal Technology Group, Flier for PA Consulting Group, 1988.									
	IF	Stephen P. A. Fodoi Vol. 251, February 1			patially Addressat	ole Parallel	Chemical Synthe	sis", Science,				
	IG	U. Maskos et al., "A Synthesised on a Gl	Study of Oligo lass Support",	onucleotide Nucleic Ac	Reassociation us ds Research, Vol	ing Large A . 21, No. 20	rrays of Oligonuc , 1992, pp. 4663	cleotides -4669.				
•	iН	U. Maskos et al., "Pa Factors Influencing of pp. 1675-1678.										
	11	J. C. Williams et al., Dangling Ends on C										
	IJ	E. M. Southern et al. of Nucleic Acids, Nu	., "Arrays of Cocleic Acids Re	omplement esearch, Vo	ary Oligonucleotid I. 22, No. 8, 1994,	les for Analy pp.1368-13	ysing the Hybridis 373.	sation Behaviour				
	IK	M. S. Shchepinov et Nucleic Acids Resea				n of Nucleic	Acids to Oligonu	icleotide Arrays",				
	IL	S. C Case-Green et to Oligonucleotides"						nase Hybridisation				
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•	JB										
		OTHER	DOCUMENT(S) (Including Auth	or, Title, Date, Pertine	ent Pages	, Etc.)				
,	JC	U. Maskos et al., "A Acids Research, Vo	Novel Method I. 21, No. 9, 1	for the Par 993, 2269-	allel Analysis of 2270.	Multiple	Mutatio	ons in Multiple	Samples", Nucle	eic	
	JD	M. J. Kozal et al., "E: Oligonucleotide Arra	xtensive Polyr ys", Nature M	morphisms ledicine, Vo	Observed in HIV I. 2, No. 7, July 1	/-1 Clad 1996, pp	e B Prot 5. 753-7	ease Gene Us 59.	ing High-Densit	/	
	JE	M. Chee et al., "Acce 1996, pp. 610-614.	1. Chee et al., "Accessing Genetic Information with High-Density DNA Arrays", Science, Vol. 274, October 996, pp. 610-614.								
	JF	Kirk -Othmer, Encycl	lopedia of Che	emical Tech	nnology, Third Ec	dition, V	ol. 3, pp	. 487-491, 197	8.		
	JG	Kirk-Othmer, Encyclo	opedia of Che	mical Tech	nology, Third Ed	ition, Vo	ol. 15, p.	224, 1981.			
•	JH	R. Polsky-Cynkin et a Sandwich Hybridizati	al.,"Use of DN ion, Clinical (IA Immobili Chemistry, V	zed on Plastic ar /ol. 31, No. 9, 19	nd Agare 985, pp.	ose Sup 1438-1	ports to Detec	DNA by		
	JI	J. Welsh et al.,"Prote	ein-DNA Cros	s-Linking" 1	TBS, Vol. 9, Dec	ember 1	1984, pp	o. 505-508.			
	IJ	G. H. Parsons, Jr., "/ pp. 224-238.	Antibody-Coat	ted Plastic ⁻	Γubes in Radioiπ	nmunoa	ssay", N	leth., Enzymol	., Vol. 73, 1973,		
	JĐ	Southern et al., Gend Oligonucleotides", Vo				c Acid S	equenc	es by Hybridiza	ation to Arrays o	f	
	JL										
EXAMINER			_		DATE CONSIDERI	ED					

	ATTY DOCKET NO. SERIAL I 99_1175 09/422						
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U.S. PA	ATENT DOCUM	MENTS_					
*EXAMINER DOCUMENT DATE INITIAL NUMBER	NAM	IE	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE		
KA 5,486,452 1/1996	Gordon	et al.	435	5			
KB 4,994,373 2/1991 S	Stavrianopo	ulos et al.	435	6			
• KC 4,968,602 11/1990	Dattag	upta	435	6			
KD 4,961,915 10/1990	Marti	in	422	116			
KE 4,849,330 7/1989	Humphrie	es et al.	435	4			
KF 4,451,433 5/1984	Yamashit	a et al.	422	63			
KG 5,202,231 4/1993	Drmai	nac	435	6			
KH 4,299,916 11/1981	Litman	et al.	435	6			
FOREIGN I	PATENT DOC	CUMENTS					
DOCUMENT DATE NUMBER	COUNTRY CLASS SUBCLASS T						
KI 84/01031 3/1984	WC						
OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.)							
KJ Webster's Third New International Dictionary, G & C Merriam Company, Publishers, Springfield, Massachusetts, USA, 1966, pages with the definitions of the terms "solid" and "sheet".							
	The American Heritage Dictionary, Second College Edition, Houghton Mifflin Company, Boston, Massachusetts, 1991, page with the definition of the term "smooth".						
KJ The Dictionary of Ceramic Science and glass".	The Dictionary of Ceramic Science and Engineering, Plenum Press, New York, NY, 1984 - definition of "smooth glass".						
KM Academic Press Dictionary of Science	Academic Press Dictionary of Science and Technology, San Diego, CA , 1992 - definition of "smooth".						
	S. F. Wolf et al., "Rapid Hybridization Kinetics of DNA Attached to Submicron Latex Particles", Nucleic Acids Research, Vol. 15, No. 7, 1987, pp. 2911-2926.						
KO J. N. Kremsky et al., "Immobilization of DNA via Oligonucleotides Containing an Aldehyde or Carboxylic Acid Group at the 5' Terminus", Nucleic Acids Research, Vol. 15, No. 7, 1987, pp. 2891-2909.							
EXAMINER DATE CONSIDERED							

Sheet 12 of 13			INFORMA	TION DISCLO	SURE STATEMEN	NT				
FORM PTO 1449 (modified)			ATTY DOC			SERIAL NO. 09/422,803				
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U.S. PATENT DOCUMENTS										
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		OTHER	DOCUMENT(S) (I	ncluding Autho	or, Title, Date, Pert	inent Page	s, Etc.)			
	LI	Letter to Simon Kiddle from Dr. Renzo Malvano, November 2002.								
ę	LL	Letter to Simon Kiddle from Dr. Gian Carlo Zucchelli, November 2002.								
	LK	Declaration of Professor Alberto Albertini, November 2002.								
	LL	Declaration of Dr. Gianni Messeri, November 2002.								
	LM	Second Statement of Professor Roger Ekins, January 2003.								
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^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy this form with next communication to applicant.

Sheet 13 of 13			INFORMA	TION DISCLOSURE ST	ATEMENT					
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PATENT AND TRADEMARK OFFICE LIST OF REFERENCES CITED BY APPLICANT(S)		APPLICANT Edwin SOUTHERN								
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	мс									
	MD									
		OTHER	DOCUMENT(S) (/	ncluding Author, Title, D	ate, Pertinent Page	es, Etc.)				
	ME	OTHER DOCUMENT(S) (Including Author, Title, Date, Pertinent Pages, Etc.) Slides used in Professor Ekins' lecture at the International Biotech RIA '88 Conference in Florence on 11 th April 1988.								
	MF	Lev. D. Gelb and K.E. Gubbins, "Characterization of Porous Glasses by Adsorption: Models, Simulations and Data Inversion", Fundamentals of Adsorption, Vol. 6, 1999, pp. 551-556.								
	MG	Pharmacia Catalogue 1998, page describing Hybond-NX.								
	МН	Translation of EP A 0197266 filed for UK national validation, 1991.								
•	МІ	E. M. Southern, Award Molecular Bioanalytics 2004, Biography.								
, 1	MJ	Award Molecular Bioanalytics 2004.								
	MK	Bio Array News, Vol. 1, No. 1, June 1, 2001, pp. 1-10.								
	ML	News Events, Journal of Biomolecular Techniques, Vol. 15, 2004, pp. 152-153.								
EXAMINER			- 11	DATE O	ONSIDERED					

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